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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,495	11/06/2003	Jean-Baptiste Galecy	232979US0	7627
22850 7590 05/27/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER HENRY, MICHAEL C				
ART UNIT		PAPER NUMBER		
1623				
NOTIFICATION DATE		DELIVERY MODE		
05/27/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/701,495

**Applicant(s)**

GALEY, JEAN-BAPTISTE

**Examiner**

MICHAEL C. HENRY

**Art Unit**

1623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 10, 13, 19-21 and 24-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 10, 13, 19-21 and 24-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/12/10 has been entered.

The following office action is a responsive to the amendment filed, 04/12/10.

The amendment filed 04/12/10 affects the application, 10/701,495 as follows:

1. Claims 1, 19, 20, 26 and 28 have been amended. Applicants' amendments have overcome the claim objections and rejections under 35 U.S.C. 112, second paragraph. Consequently, the said claim objections and rejections are withdrawn. However, the rejection made under 35 U.S.C. 103(a) of the prior office action mailed 12/11/09 is maintained. Also, a new ground(s) rejection is made under 35 U.S.C. 112, second paragraph.
2. The responsive to applicants' arguments is contained herein below.

Claims 1, 4, 10, 13, 19-21, 24-31 are pending in application

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 10, 13, 19-21, 24-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites phrase “topically applying to one or more zones of the face or forehead”. However, the claim is indefinite since it is unclear who, whom or what is the recipient of said composition that is applied to one or more zones of the face or forehead.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 10, 13, 19-21, 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoenrock et al. (DE19545107 (A1), English Machine Translation).

Claim 1 is drawn to a method for softening expression lines on a face and/or forehead in need thereof, comprising topically applying to one or more zones of the face or forehead marked with expression lines a composition comprising a physiologically acceptable medium, and 0.1% to 10% by weight of adenosine with respect to the total composition weight, in an amount effective to provide a relaxing effect on skin associated with the expression lines, thereby softening the expression lines. Claims 4 is drawn to said method wherein the composition comprises specific % by weight of adenosine with respect to the total composition weight. Dependent claims 10, 13, 19-21 are drawn to a method wherein the composition has a specific relaxing effect, specific % by weight of adenosine, the use of an adenosine analogue in the said composition and the topical application to the skin an effective amount of said composition to reduce laugh lines and/or reduce frown lines. Claims 24-31 are drawn to said method wherein the composition further comprises specific compounds, wherein the composition provides

relaxing effects on dermal cells associated with the expression lines, the expression lines are of specific type and wherein specific %wt of adenosine is used.

Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and

especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2<sup>nd</sup> paragraph and entire article).

The difference between applicant's claimed method and the method of Schoenrock et al. is that Schoenrock et al. do not disclose softening expression lines on a face and/or forehead, per se. However, Schoenrock et al. disclose that the adenosine can be used to treat the symptoms of exogenous skin aging which suggest or implies that adenosine (especially in cosmetic and dermatological preparations) can be used to treat dryness, itchiness, thinning or thickening of the skin, wrinkles and fine lines, areas of hyperpigmentation (called age or liver spots), and a mottled appearance which are the symptoms of skin aging.

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made to have used the method of Schoenrock et al. to treat the symptoms of aging skin such as wrinkles or expression lines on said face and/or forehead with a composition comprising adenosine, and to use different % by weight of adenosine at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles or expression lines), and the kind of subject or mammal being treated.

One having ordinary skill in the art would have been motivated to use the method of Schoenrock et al. to treat the symptoms of aging skin such as wrinkles or expression lines on said face and/or forehead with a composition comprising adenosine, and to use different % by weight of adenosine at the required location, based on factors like the severity of the skin or facial

condition (such as wrinkles or expression lines), and the kind of subject or mammal being treated. Also, it should be noted that it is obvious to further add other compounds or substances to said composition such as compounds or substances that increases the amount or levels intra- or extra-cellular adenosine, agonist of an adenosine receptor, adenosine salts and derivatives.

***Response to Arguments***

Applicant's arguments with respect to claims 1, 4, 10, 13, 19-21, 24-31 have been considered but are not found convincing.

The Applicant argues that Schoenrock does not relate to softening expression lines. Rather, Schoenrock relates to treating exogenous signs of skin aging caused by external factors such as UV light and chemicals. (See, page 1, third paragraph of Schoenrock).

However, it should be noted that wrinkles (including expression lines) are exogenous signs of skin aging that can be caused by external factors such as UV light (from the sun). Moreover, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and

B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B states that "Natural expressions that use specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2<sup>nd</sup> paragraph and entire article).

The Applicant argues that the evidence of record demonstrates that expression lines differ from other wrinkles such as those caused by external factors such as UV light (sun damage), and expression lines are "difficult to treat." (See, previously submitted Exhibits A-C). The present application (at pages 2-3) further explains the difference between expression lines and exogenous wrinkles by explaining that expression lines are produced by mechanisms which differ from the mechanisms associated with aging lines (that is, expression lines are caused by the stress exerted on skin by the muscles which produce facial expressions, whereas aging lines are not). The



present application also confirms the evidence of record: typical aging treatments do not have an effect on expression lines.

However, the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle and that Schoenrock et al. use the same composition or compound on the skin as applicant. Also, it should be noted that the method of applicant's previously presented dependent claims 21 and 22 involves decreasing wrinkles with the same said composition as Schoenrock et al. This implies that the applicant also considers expression lines as been wrinkles (see previously presented claims 21 and 22 of the instant invention). It addition, it should be noted that the symptoms of aging skin include wrinkles (e.g., expression lines). Moreover, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that "The wrinkles that seem to bother us most are "character" or "expression" lines" (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B sates that "Natural expressions that use

specific facial muscles may cause some wrinkles called "expression lines" to reappear" (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.'s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant's attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that "Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes ("crow's feet") (see page 1, 2<sup>nd</sup> paragraph and entire article).

The Applicant argues that the evidence of record demonstrates that merely because methods of treating other types of less difficult-to-treat wrinkles such as those caused by UV light might exist, it does not mean that such methods (directed to a different type of wrinkle) teach or suggest anything about how to treat expression lines. They are different conditions treated via different mechanisms. Accordingly, Schoenrock's disclosure related to treating wrinkles caused by exogenous factors such as sun damage or UV light cannot teach or suggest how to treat expression lines, which are recognized as being different, more difficult-to-treat types of wrinkles.

However, the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle and that Schoenrock et al. use the same composition or compound on the skin as applicant. Also, it should be noted that the method of applicant's previously presented dependent claims 21 and 22 involves decreasing wrinkles with the same said composition as Schoenrock et al. This implies that the applicant also considers expression lines as been wrinkles (see previously presented claims 21 and 22 of the instant invention). It addition, it should be noted that the symptoms of aging skin include wrinkles (e.g., expression lines). Moreover, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). In addition, Schoenrock et al. disclose that the adenosine can be used to treat the symptoms of exogenic skin aging which suggest or implies that adenosine (especially in cosmetic and dermatological preparations) can be used to treat dryness, itchiness, thinning or thickening of the skin, wrinkles and fine lines, areas of hyperpigmentation (called age or liver spots), and a mottled appearance which are the symptoms of skin aging. Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, "expression lines" are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant's attention is drawn to Exhibit A and B which disclose

that expression lines are forms of wrinkles. Exhibit A states that “The wrinkles that seem to bother us most are “character” or “expression” lines” (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B states that “Natural expressions that use specific facial muscles may cause some wrinkles called “expression lines” to reappear” (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.’s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant’s attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that “Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes (“crow’s feet”) (see page 1, 2<sup>nd</sup> paragraph and entire article).

The Applicant argues that Stated another way, Schoenrock neither teaches nor suggests that the adenosine would have any effect whatsoever on decontracting lines, which tension/contortion resulted from repeated mimics and endogeneous ageing. Contrary to the Examiner’s assertions, Schoenrock’s disclosing a method of increasing cell proliferation in skin does not relate to the claimed relaxation effect; Schoenrock’s disclosing a method of combatting/easing the symptoms of exogenic skin aging does not relate to the invention methods (“exogenic” means derived from outside sources, so wrinkles caused by exogenic factors cannot

be expression lines); and merely because adenosine may have been known to treat some types of conditions (for example, through cell renewal), adenosine was not known to treat expression lines which are caused by different factors and are treated by different mechanisms.

However, the mechanism or manner by which the expression lines (which applicant appears to be referring to as decontracting lines, which tension/contortion resulted from repeated mimics and endogenous ageing) are produced does not alter the fact that it is a wrinkle or a type of wrinkle and that Schoenrock et al. use the same composition or compound on the skin as applicant. Also, it should be noted that the method of applicant's previously presented dependent claims 21 and 22 involves decreasing wrinkles with the same said composition as Schoenrock et al. This implies that the applicant also considers expression lines as been wrinkles (see previously presented claims 21 and 22 of the instant invention). In addition, it should be noted that the symptoms of aging skin include wrinkles (e.g., expression lines). Moreover, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenous skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). In addition, Schoenrock et al. disclose that the adenosine can be used to treat the symptoms of exogenous skin aging which suggest or implies that adenosine (especially in cosmetic and dermatological preparations) can be used to treat dryness, itchiness, thinning or thickening of the skin, wrinkles and fine lines, areas of hyperpigmentation (called age or liver spots), and a mottled appearance which are the symptoms of skin aging. Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a

skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, “expression lines” are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant’s attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that “The wrinkles that seem to bother us most are “character” or “expression” lines” (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B states that “Natural expressions that use specific facial muscles may cause some wrinkles called “expression lines” to reappear” (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.’s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant’s attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that “Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes (“crow’s feet”) (see page 1, 2<sup>nd</sup> paragraph and entire article).

The Applicant argues that in summary, Schoenrock does not teach or suggest softening expression lines by applying adenosine thereto. Rather, Schoenrock teaches treating wrinkles or

damaged skin caused by UV light or chemicals. Again, as explained in the present specification (pages 2-4), the conditions treated by Schoenrock are different from expression lines: their causes are different and their treatments are different. For example, whereas wrinkles are caused by lack of collagen and can be addressed through collagen protection and/or synthesis, expression lines are caused by different mechanisms and cannot be addressed by increasing or protecting collagen. Thus, although Schoenrock teaches addressing collagen-related conditions such as wrinkles, it neither teaches nor suggests reducing or softening conditions unrelated to collagen levels. Because expression lines are not collagen-related, Schoenrock could not possibly teach or suggest anything concerning treatment of this condition.

However, Schoenrock et al. disclose a method of increasing cell proliferation in human skin or combating and easing the symptoms of exogenic skin aging by applying adenosine (especially in cosmetic and dermatological preparations) to the skin (see abstract, description and claims). In addition, Schoenrock et al. disclose that the adenosine can be used to treat the symptoms of exogenic skin aging which suggest or implies that adenosine (especially in cosmetic and dermatological preparations) can be used to treat dryness, itchiness, thinning or thickening of the skin, wrinkles and fine lines, areas of hyperpigmentation (called age or liver spots), and a mottled appearance which are the symptoms of skin aging. Furthermore, Schoenrock et al. disclose that adenosine can be used in concentrations from 0.01% to 10 % (see claims and description). In addition, Schoenrock et al. disclose or suggest that adenosine analogue such as cAMP can be used as a skin humidity increasing substance (see description). It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines)

generally occur. Furthermore, “expression lines” are referred to as types of wrinkles. That is, expression lines are wrinkles. Applicant’s attention is drawn to Exhibit A and B which disclose that expression lines are forms of wrinkles. Exhibit A states that “The wrinkles that seem to bother us most are “character” or “expression” lines” (see page 1, 1<sup>st</sup> line of 2<sup>nd</sup> paragraph). In addition, Exhibit B states that “Natural expressions that use specific facial muscles may cause some wrinkles called “expression lines” to reappear” (see page 4, 2<sup>nd</sup> paragraph, lines 2-3). Thus, these exhibits disclose that expression lines are wrinkles. It must also be noted that Schoenrock et al. apply the same composition to the skin of the same subject as applicant and consequently it should have the same inherent effect of softening of expression lines. Schoenrock et al.’s composition also reduces or treats wrinkles (symptoms of aging skin) which includes frown lines and laugh lines-types of wrinkles and contains adenosine. It should be noted that the application of the composition to skin also encompasses the skin on the face and forehead and especially since that is where wrinkles (including expression lines) generally occur. Furthermore, Applicant’s attention is drawn to Exhibit C which discloses that expression lines and frown lines are different forms of wrinkles (i.e., dynamic wrinkles). For example, Exhibit C states that “Dynamic wrinkles typically form across the **forehead**, between the eyebrows (**frown lines**), and on the sides of the eyes (“crow’s feet”) (see page 1, 2<sup>nd</sup> paragraph and entire article). Also, it should be noted that the mechanism or manner by which the expression lines are produced does not alter the fact that it is a wrinkle or a type of wrinkle and that Schoenrock et al. use the same composition or compound on the skin as applicant. And, as set forth in the above rejection, one having ordinary skill in the art would have been motivated to use the method of Schoenrock et al. to treat the symptoms of aging skin such as wrinkles or expression lines on said face and/or



forehead with a composition comprising adenosine, and to use different % by weight of adenosine at the required location, based on factors like the severity of the skin or facial condition (such as wrinkles or expression lines), and the kind of subject or mammal being treated.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Henry  
May 18, 2010.

/Shaojia Anna Jiang/  
Supervisory Patent Examiner  
Art Unit 1623